



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

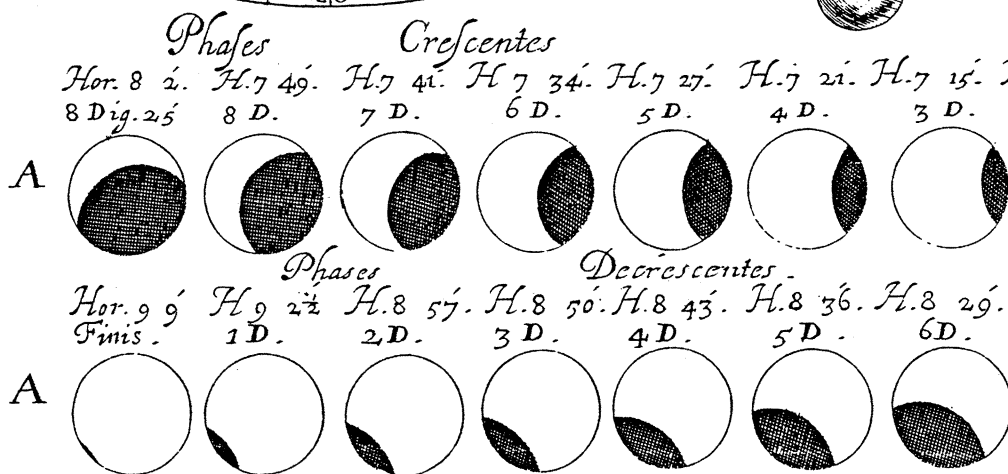
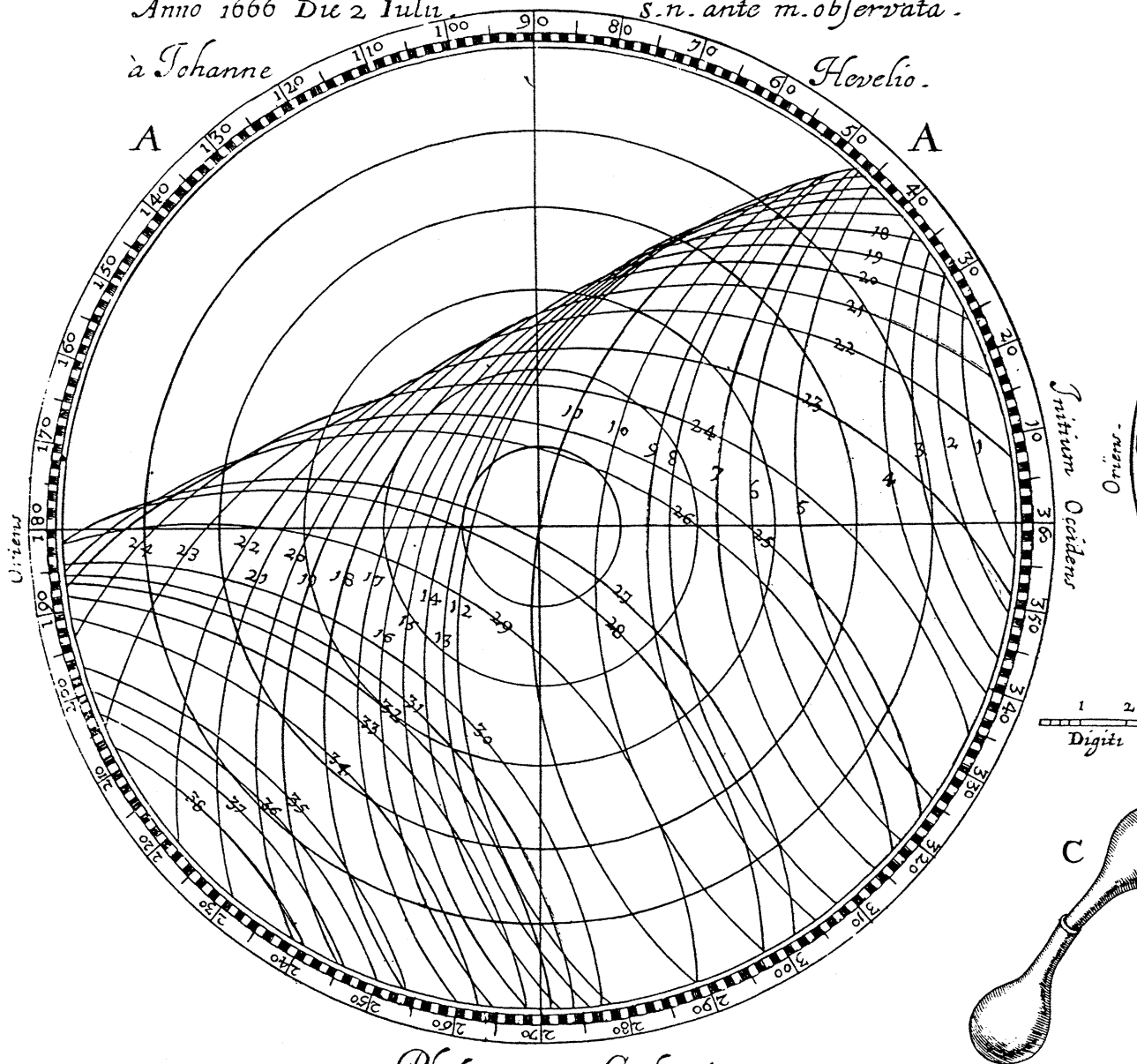
Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

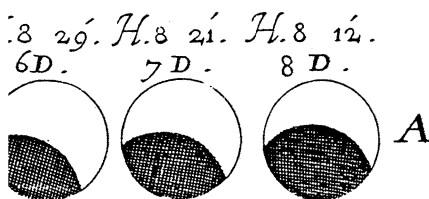
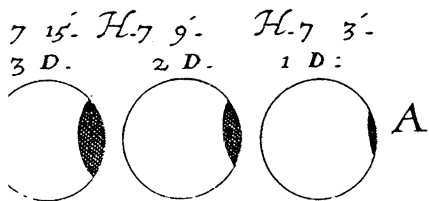
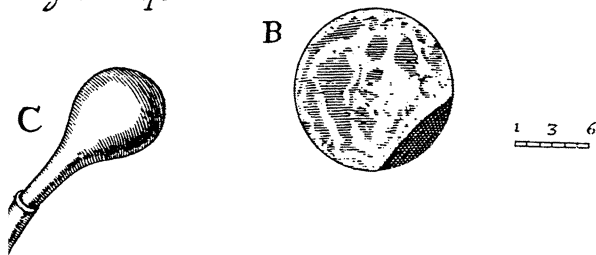
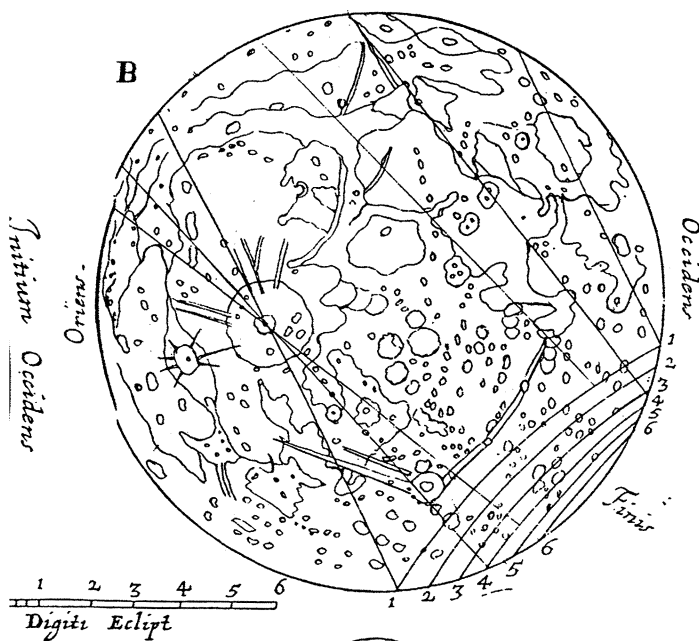
Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

*Eclipsis Solaris GEDANI.*  
*Anno 1666 Die 2 Julii. s.n. ante m. observata.*  
*à Johanne Hevelio.*



*Eclipsis Luna observata*  
 GEDANI,  
 Anno 1666, Die ☿ 16 Junii, St. n.  
 à Johanne Hevelio.



# PHILOSOPHICAL TRANSACTIONS.

---

Munday, January 21. 1666.

---

## The Contents.

*An Account, formerly promised, of Monsieur Hevelius's Calculation of the late Solar Eclipse's Quantity, Duration, &c. The Figure of the Star in the Constellation of Cygnus, together with the New Star in it, discovered some years ago, and very lately seen again by the same Mr. Hevelius. An Extract of a Letter, written by Mr. Auzout, concerning a way of his, for taking the Diameters of the Planets, and for knowing the Parallax of the Moon: Giving also a Reason, why in the Solar Eclipse above-mentioned, the Diameter of the Moon did increase about the end. A Relation of the loss of the Way to prepare the Bononian Stone for shining. A Description of a Swedish Stone, affording Sulphur, Vitriol, Allum, and Minium. A Relation of the Raining of Ashes. An Extract of a Letter from Rome, rectifying the Relation of Salamanders living in Fire. An Account of several Engagements for Observing of Tydes. Some Suggestions for Remedies against Cold. A Relation of an uncommon Accident in two Aged Persons. An Account of Two Books, I. ISMAELIS BULLIALDI ad Astronomos Monita duo: Primum, de Stella Nova, in Collo Ceti ante aliquot annos visa. Alterum, de Nebulosa Stella in Andromeda Cinguli parte Borea, ante biennium itum oritá. II. ENTRETIENS sur les vies & sur les Ouvrages des plus excellens Peintres, anciens & modernes, par M. FELIBIEN.*

---

Monsieur Hevelius's Calculation of the late Solar  
Eclipse's Quantity, Duration, &c.

**T**His Calculus was not long since communicated by Monsieur Hevelius in a Letter to the Publisher, as follows,

C c c

Eclipses

*Eclipsis Solaris.**Observata An. 1666. D. 2. Julii, St. N. Mane, à Johanne Hevelio.*

Ordo Pha- sium	Quantitas Phasium.	Temp. altin ec. horol ambulat.	Temp. ex Sciother.	Altitude ☉	Tempus correct.	<i>Animadvertenda.</i>
		H. , , "	H. , , "	o. ,	H. , , "	
		5.51.11	5.51. 0	17.45	5.53.12	Quod Sciatericum cum cor- recto tempore non omnino convenit, non-nisi Lineæ Me- ridianæ imputandum.
		5.57. 5	5.57. 0	18.37	5.59.28	
		6. 0. 0	6. 0. 0	18.55	6. 1.28	
	Initium.	6.55.30			6 57.30	Initium circa 79 gr: à puncto Zenith occasum versus conti- git.
1	0 $\frac{3}{4}$ dig.	6.57.30			5.59.30	
2	0 $\frac{3}{4}$	7 0.23	7. 0. 0		7. 2.23	
3	1 $\frac{1}{4}$	7. 2.30	7. 2. 0		7. 4.30	
4	1 $\frac{1}{4}$ dig.	7. 4.50	7. 5 ferè.		7. 6.50	
5	1 $\frac{3}{4}$ ferè.	7.10.57	7.10		7.12.57	
6	3 $\frac{3}{4}$	7.14.59	7.15		7.16.59	
7	3 $\frac{3}{4}$	7.17.50	7.18 ferè.		7.19.50	
8	4 $\frac{3}{4}$ dig.	7.21.35	7.21		7.23.35	
9	4 $\frac{3}{4}$	7.23.43	7.23 ferè.		7.25.43	
10	5 $\frac{1}{4}$	7.27.53	7.28		7.29.53	Hujusque Semi Diameter Lunæ equalis existit Solari.
11	6	7.31.50	7.32		7.33.50	
12	6 $\frac{3}{4}$	7.36.55	7.37		7.38.55	
13	6 $\frac{7}{8}$ paul. plus.	7.38. 5	7.38		7.40. 0	
14	7 $\frac{1}{8}$	7.39.45	7.39		7.41.45	
15	7 $\frac{1}{4}$ paul. plus.	7.42.30	7.42		7.44.30	
16	7 $\frac{1}{2}$	7.44. 6	7.44		7.46 6	
17	7 $\frac{3}{4}$	7.46. 0	7.46		7.48. 0	
18	8 ferè.	7.48.25	7.48 erè.		7.50.25	
19	8 $\frac{1}{2}$	7.51.15	7.51		7.53.15	
20	8 $\frac{1}{4}$ ; a-l. plus.	7.53.37	7.52		7.55.37	
21	8 $\frac{3}{4}$	7.55.45	7.56 erè.		7 57.45	
22	8 $\frac{3}{4}$ paul. in	7.59. 5	7.59		8. 1. 5	Maxima obscuratio existit igit. 8. 25' hora 8. 2'.
23	8 $\frac{1}{2}$	8. 6.30	8. 6		8. 8.30	

Ordo

(371)

Orde Pha- sion	Quantitas Phasium.	Temp. astim. sec. horol. attulac.	Temp. ex sciother.	Altitud. ☉	Tempus correct.
24	7 $\frac{3}{4}$	H. , " 8.11.25	H. , " 8.12	0.	H. , " 8.13.25
25	7 $\frac{1}{4}$ fere.	8.17.30	8.18		8.19.30
26	7 fere.	8.19.41	8.19		8.21.41
27	5 $\frac{7}{8}$	8.28. 8	8.28		8.30. 8
28	5 $\frac{1}{2}$ fere.	8 30 14	8.30		8.32.14
29	4 $\frac{3}{4}$	8 36 25	8.36		8.38.25
30	3 $\frac{5}{8}$	8 43 19	8.43		8.45.19
31	3 $\frac{1}{4}$	8 46 12	8.46 fere.		8.48.12
32	3	8.47.32	8.47		8.29.32
33	2 $\frac{3}{4}$	8.50.57	8.50		8 2.57
34	2 $\frac{1}{2}$ fere.	8.54.15	8.54		8.56.15
35	1 $\frac{3}{8}$	8.58.24	8.58		9. 0.24
36	1 $\frac{1}{4}$	8.59.35	8.59		9. 1.35
37	0 $\frac{1}{2}$	9. 1.38	9. 1		9. 3.38
38	0 $\frac{1}{4}$	9. 3.20	9. 3		9. 5.20
39	Finis.	9. 6.53	9. 6	Altit. ☉	9. 8.53
		9.23. 6		47.33	9.25.28
		9.24.16		47.42	9.26.45
		9.28.29		48.10	9.30.42
		9.30.36		48.28	9.33.12

*Animadvertenda.*

Hic Semidiameter Lune ad  
8<sup>a</sup> vel 9<sup>a</sup> major apparuit. \*  
\* See Numb. 19. of the Philo-  
sophical Transactions, p. 347.

Punctum finis distat a ver-  
ticali ad Ortum 143 gr.

This Observation is by the same *Astronomer*, represented also by the *Figures AAAAAA*; as that of the *Horizontal Eclipse* of the *Moon*, is, by the *Figures BB*.